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**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**LISTING OF CLAIMS**

1. (Currently amended) A method for increasing transmission distance of a fiber optical communications link using tedons comprising the steps of:

encoding a data signal to be transmitted using an encoding scheme that reduces a number of ones disproportionally relative to a number of zeros in said data signal; and transmitting said encoded data signal over said fiber optical communications link.

2. (Original) The method according to claim 1, wherein said encoding scheme is pulse position modulation.

3. (Currently amended) A method for increasing transmission distance of a fiber optical communications link using tedons comprising the steps of:

receiving an encoded data signal, wherein said encoded data signal was encoded by a transmitter using an encoding scheme that reduced a number of ones disproportionally relative to a number of zeros in a data signal; and decoding said encoded data signal.

4. (Original) The method according to claim 3, wherein said encoding scheme is pulse position modulation.

5. (Currently amended) A method for increasing transmission distance of a fiber optical communications link using tedons comprising the steps of:

encoding a data signal to be transmitted using an encoding scheme that reduces a number of ones disproportionally relative to a number of zeros in said data signal; transmitting said encoded data signal over said fiber optical communications link;

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receiving said encoded data signal; and  
decoding said encoded data signal.

6. (Original) The method according to claim 5, wherein said encoding scheme is pulse position modulation.

7. (Currently amended) A method for increasing transmission data rate of a fiber optical communications link using tedons comprising the steps of:

encoding a data signal to be transmitted using an encoding scheme that reduces a number of ones disproportionally relative to a number of zeros in said data signal; and  
transmitting said encoded data signal over said fiber optical communications link.

8. (Original) The method according to claim 7, wherein said encoding scheme is pulse position modulation.

9. (Currently amended) A method for increasing transmission data rate of a fiber optical communications link using tedons comprising the steps of:

receiving an encoded data signal, wherein said encoded data signal was encoded by a transmitter using an encoding scheme that reduced a number of ones disproportionally relative to a number of zeros in a data signal; and  
decoding said encoded data signal.

10. (Original) The method according to claim 9, wherein said encoding scheme is pulse position modulation.

11. (Currently amended) A method for increasing transmission data rate of a fiber optical communications link using tedons comprising the steps of:

encoding a data signal to be transmitted using an encoding scheme that reduces a number of ones disproportionally relative to a number of zeros in said data signal;  
transmitting said encoded data signal over said fiber optical communications link;

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receiving said encoded data signal; and  
decoding said encoded data signal.

12. (Original) The method according to claim 11, wherein said encoding scheme is pulse position modulation.

13. (Currently amended) A method for increasing transmission distance and transmission data rate of a fiber optical communications link using tedons comprising the steps of:

encoding a data signal to be transmitted using an encoding scheme that reduces a number of ones disproportionally relative to a number of zeros in said data signal;  
transmitting said encoded data signal over said fiber optical communications link;  
receiving said encoded data signal; and  
decoding said encoded data signal.

14. (Original) The method according to claim 13, wherein said encoding scheme is pulse position modulation.

15. (Currently amended) A system for increasing transmission distance of a fiber optical communications link using tedons comprising:

an encoder for encoding a data signal to be transmitted using an encoding scheme that reduces a number of ones disproportionally relative to a number of zeros in said data signal; and

a transmitter coupled to said encoder for transmitting said encoded data signal over said fiber optical communications link.

16. (Original) The system according to claim 15, wherein said encoding scheme is pulse position modulation.

17. (Currently amended) A system for increasing transmission distance of a fiber

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optical communications link using tedons comprising:

a receiver for receiving an encoded data signal, wherein said encoded data signal was encoded by a transmitter using an encoding scheme that reduced a number of ones disproportionally relative to a number of zeros in a data signal; and

a decoder coupled to said receiver for decoding said encoded data signal.

18. (Original) The system according to claim 17, wherein said encoding scheme is pulse position modulation.

19. (Currently amended) A system for increasing transmission distance of a fiber optical communications link using tedons comprising:

an encoder for encoding a data signal to be transmitted using an encoding scheme that reduces a number of ones disproportionally relative to a number of zeros in said data signal;

a transmitter coupled to said transmitter for transmitting said encoded data signal over said fiber optical communications link;

a receiver for receiving said encoded data signal; and

a decoder coupled to said receiver for decoding said encoded data signal.

20. (Original) The system according to claim 19, wherein said encoding scheme is pulse position modulation.

21. (Currently amended) A system for increasing transmission data rate of a fiber optical communications link using tedons comprising:

an encoder for encoding a data signal to be transmitted using an encoding scheme that reduces a number of ones disproportionally relative to a number of zeros in said data signal; and

a transmitter coupled to said encoder for transmitting said encoded data signal over said fiber optical communications link.

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22. (Original) The system according to claim 21, wherein said encoding scheme is pulse position modulation.

23. (Currently amended) A system for increasing transmission data rate of a fiber optical communications link using tedons comprising:

a receiver for receiving an encoded data signal, wherein said encoded data signal was encoded by a transmitter using an encoding scheme that reduced a number of ones disproportionally relative to a number of zeros in a data signal; and

a decoder coupled to said receiver for decoding said encoded data signal.

24. (Original) The system according to claim 23, wherein said encoding scheme is pulse position modulation.

25. (Currently amended) A system for increasing transmission data rate of a fiber optical communications link using tedons comprising:

an encoder for encoding a data signal to be transmitted using an encoding scheme that reduces a number of ones disproportionally relative to a number of zeros in said data signal;

a transmitter coupled to said encoder for transmitting said encoded data signal over said fiber optical communications link;

a receiver for receiving said encoded data signal; and

a decoder coupled to said receiver for decoding said encoded data signal.

26. (Original) The system according to claim 25, wherein said encoding scheme is pulse position modulation.

27. (Currently amended) A system for increasing transmission distance and transmission data rate of a fiber optical communications link using tedons comprising:

an encoder for encoding a data signal to be transmitted using an encoding scheme that reduces a number of ones disproportionally relative to a number of zeros

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in said data signal;

a transmitter coupled to said encoder for transmitting said encoded data signal over said fiber optical communications link;

a receiver for receiving said encoded data signal; and

a decoder coupled to said receiver for decoding said encoded data signal.

28. (Original) The system according to claim 27, wherein said encoding scheme is pulse position modulation.

29. (Currently amended) A system for increasing transmission distance of a fiber optical communications link using tedons comprising:

means for encoding a data signal to be transmitted using an encoding scheme that reduces a number of ones disproportionally relative to a number of zeros in said data signal;

means for transmitting said encoded data signal over said fiber optical communications link;

means for receiving said encoded data signal; and

means for decoding said encoded data signal.

30. (Currently amended) A system for increasing transmission data rate of a fiber optical communications link using tedons comprising:

means for encoding a data signal to be transmitted using an encoding scheme that reduces a number of ones disproportionally relative to a number of zeros in said data signal;

means for transmitting said encoded data signal over said fiber optical communications link;

means for receiving said encoded data signal; and

means for decoding said encoded data signal.

31. (Currently amended) A system for increasing transmission distance and

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transmission data rate of a fiber optical communications link using tedons comprising:

means for encoding a data signal to be transmitted using an encoding scheme that reduces a number of ones disproportionally relative to a number of zeros in said data signal;

means for transmitting said encoded data signal over said fiber optical communications link;

means for receiving said encoded data signal; and

means for decoding said encoded data signal.